

Title MON-TRANSGENIC HERBICIDE RESISTANT PLANTS
 Inventor(s): Peter BEETHAM et al.
 Application No: 09/685,403
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							Section 1
(1) 1	10	20	30	40	50	60	71
atppspcDNA.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
bnpescdna.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
petaroacdnA.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
zmpesps.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Consensus	(1) ATGGCGCAA	TAGGAAATCTGCATGG	GTGCAGAACCCAT	TCTCATCTCCAAATCTCTC	AAATC		
							Section 2
(72) 72	80	90	100	110	120	130	142
atppspcDNA.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
bnpescdna.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
petaroacdnA.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
zmpesps.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Consensus	(72) CAA	CAAC	CAAATCTCC	TTT	TC	GTTCCT	TTGAAGACGCCAGCAT
							CACGAGCTT
							Section 3
(143) 143	150	160	170	180	190	200	213
atppspcDNA.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
bnpescdna.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
petaroacdnA.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
zmpesps.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Consensus	(143)	CTTGGGGATTGAAAGAGTGGAAATGATG	TAA	TTGCTCTGAG	TTGCTCC	TTAAGGT	
							Section 4
(214) 214	220	230	240	250	260	270	284
atppspcDNA.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
bnpescdna.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
petaroacdnA.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
zmpesps.seq	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Consensus	(214) ACAGCTTCTGGTTCCACGGC	GAGAARGCTTC	GAGATTTGCTCAACCCATTAGAGAA	ATCTCCGGCT			

FIG. 3A

Title ON-TRANSGENIC HERBICIDE RESISTANT PLANTS
 Inventor(s): Peter BEETHAM et al.
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	Section 5					
	285	290	300	310	320	330
atepspscdna.seq	(285)	T	C	A	G	C
bnepscDNA.seq	(276)	T	T	T	T	T
bnepscDNA.seq	(284)	C	A	C	T	A
petaroacdna.seq	(284)	G	A	T	T	A
zmepscDNA.seq	(57)	G	G	T	C	A
zmepscDNA.seq	(57)	G	G	T	C	A
Consensus	(285)	T	T	A	T	A
	Section 6					
	356	361	370	380	390	400
atepspscdNA.seq	(347)	T	C	C	G	T
bnepscDNA.seq	(335)	T	C	C	G	T
petaroacdna.seq	(335)	T	T	T	T	T
zmepscDNA.seq	(128)	T	T	T	T	T
zmepscDNA.seq	(128)	T	T	T	T	T
Consensus	(356)	T	T	T	T	T
	Section 7					
	427	432	440	450	460	470
atepspscdNA.seq	(427)	C	C	T	A	C
bnepscDNA.seq	(418)	C	C	T	A	C
petaroacdna.seq	(408)	C	C	T	A	C
zmepscDNA.seq	(408)	C	C	T	A	C
zmepscDNA.seq	(199)	G	A	C	T	C
Consensus	(427)	A	A	T	A	C
	Section 8					
	498	503	510	520	530	540
atepspscdNA.seq	(498)	A	A	C	C	T
bnepscDNA.seq	(489)	A	A	C	C	T
petaroacdna.seq	(477)	A	A	C	C	T
zmepscDNA.seq	(477)	A	A	C	C	T
zmepscDNA.seq	(267)	T	A	T	T	C
Consensus	(498)	A	A	T	T	C

FIG. 3B

Title ON-TRANSGENIC HERBICIDE RESISTANT PLANTS
 Inventor(s): Peter BEETHAM et al.
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	Section 9																						
	569	580	580	600	610	620	630	639	640	650	660	670	680	690	700	710	720	730	740	750	760	770	781
atnpscdna.seq	(569)	C	G	C	A	T	A	T	A	T	C	T	A	C	A	C	T	A	T	C	G	T	
bnpacdna.seq	(580)	C	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
petnacdna.seq	(546)	T	A	T	A	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	
(548)	T	A	T	A	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
ztnpscdna.seq	(338)	C	G	C	A	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	
ztnpsps.seq	(369)	T	A	T	C	G	C	G	C	T	A	T	C	G	C	T	A	T	C	G	T	T	
Consensus																							
atnpscdna.seq	(640)	A	T	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
bnpacdna.seq	(631)	T	A	T	C	G	C	G	C	T	A	T	A	C	T	A	T	C	G	T	T	T	
petnacdna.seq	(619)	T	A	T	C	G	C	G	C	T	A	T	A	C	T	A	T	C	G	T	T	T	
(619)	T	A	T	C	G	C	G	C	T	A	T	A	C	T	A	T	C	G	T	T	T	T	
petnacdna.seq	(409)	A	T	C	G	C	G	C	T	A	T	A	C	T	A	C	T	A	C	G	T	T	
ztnpsps.seq	(480)	C	G	C	T	A	T	A	T	C	T	A	T	C	G	C	T	A	C	G	T	T	
Consensus	(640)	G	A	T	T	G	T	T	G	T	C	T	A	C	T	G	C	T	A	C	G	T	
atnpscdna.seq	(711)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
bnpacdna.seq	(702)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
petnacdna.seq	(690)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
(690)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	T	
petnacdna.seq	(680)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
ztnpsps.seq	(480)	C	G	C	T	A	T	A	T	C	T	A	T	C	G	C	T	A	C	G	T	T	
Consensus	(711)	T	C	G	T	A	T	A	T	C	T	A	T	C	G	C	T	A	C	G	T	T	
atnpscdna.seq	(782)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
bnpacdna.seq	(773)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
petnacdna.seq	(761)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	
(761)	T	A	C	T	A	T	A	T	C	T	A	T	A	C	T	A	T	C	G	T	T	T	
ztnpsps.seq	(661)	C	T	G	T	A	T	A	T	C	T	A	T	C	G	C	T	A	C	G	T	T	
Consensus	(782)	T	A	C	T	A	T	A	T	C	T	A	T	C	G	C	T	A	C	G	T	T	

FIG. 3C

Title: NON-TRANSGENIC HERBICIDE RESISTANT PLANTS
Inventor(s): Peter BEETHAM et al.
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PAGE 5/12 * RCVD AT 9/29/2004 5:23:05 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/0 * DNIS:7466836 * CSID:352 372 5800 * DURATION (mm:ss):08-04

FIG. 3D

Title MON-TRANSGENIC HERBICIDE RESISTANT LANTS
Inventor(s): Peter BEETHAM et al.
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Title: ON-TRANSGENIC HERBICIDE RESISTANT PLANTS
 Inventor(s): Peter BEETHAM et al.
 Application No: 09/685,403
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Section 21									
(1421) 1421	1430	1440	1450	1460	1470	1480			1491
atepspscDNA.seq (1412)	A	G	T	C	A	T			A
bnepscDNA.seq (1400)	T	C	G	T	C	G			A
peteroacna.seq (1401)	T	C	G	T	C	G			A
zmepps.seq (1190)	T	C	G	T	C	G			A
Consensus (1421)	CCGAGATTGATACATATGATGATA	AGAATGGCCATGGC	TTTCTCTTGCTGTGCTGATGTTCC						Section 22
(1492) 1492	1500	1510	1520	1530	1540	1550			1562
atepspscDNA.seq (1483)	A	T	C	T	C	T			A
bnepscDNA.seq (1471)	T	C	G	T	C	G			A
peteroacna.seq (1471)	T	C	G	T	C	G			A
zmepps.seq (1261)	A	T	C	G	A	T			A
Consensus (1492)	ATCGGAAACCCGG	GCACCTGCTGCTGCTGACTTCC	CCCTCCGATGACTCTGGCACTTCC	AACTCCCTGCTGAAAG	ATCAC				Section 23
(1563) 1563	1572								
atepspscDNA.seq (1554)									
bnepscDNA.seq (1542)									
peteroacna.seq (1542)									
zmepps.seq (1332)									
Consensus (1563)	AAAGCATTAA								

FIG. 3F

Title **MON-TRANSGENIC HERBICIDE RESISTANT PLANTS**
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	Section 1					
	10	20	30	40	50	60
(1) atepsps.PRO	1	-B-	S-A-L	O-P-H-P-R-A-Y-I	-T-	-
(1) bnepps.PRO		S-E-R-	C-V-	-E-	-V-	-
(1) petaroa.PRO		S-E-R-	C-V-	-E-	-V-	-
(1) zmepps.PRO		S-E-R-	C-V-	-E-	-V-	-
Consensus	(1) MAQISRICNGVQNP	IISNLKSNSQ	KSP SVSLKT Q	PKASSWGLKKSQMLLIGSDIR	PLK	Section 2
	(75) 75	80	90	100	110	120
atepsps.PRO	(68)					
bnepps.PRO	(64)					
petaroa.PRO	(84)					
zmepps.PRO	(3)					
Consensus	(76) VSAASVSTA	E-K-A-S-E-I-V-L-Q-P-I-K-E-I-S-G-T-K-L-P-G-S-K-S-L-S-N-R-I-L-L-A-L-S-E-G-T-T-V-V-D-N-L-L-N-S-D-D-I-N-Y-M-L-G-A-L-K-T-L-G-L-N-V	Section 3			
	(149) 149	160	170	180	190	200
atepsps.PRO	(142)					
bnepps.PRO	(138)					
petaroa.PRO	(138)					
zmepps.PRO	(67)					
Consensus	(149) E DSANANRAVVEGCGGIFPPVSIDS	KSDIQLFLIGRAGTAAMPLTAAVTAAGGNASYVLDGVVRNMRBPIGDLVVG	Section 4			
	(223) 223	230	240	250	260	270
atepsps.PRO	(216)					
bnepps.PRO	(212)					
petaroa.PRO	(212)					
zmepps.PRO	(140)					
Consensus	(223) LKQLGADVDCTLGTNCPPVVRNANGGLPGGKVKGSISSQYLTALLMAPLA	LGDVBJIEIIDKLISVPYVENT				
	(298)					

Title: N-TRANSGENIC HERBICIDE RESISTANT ANTS
 Inventor(s): Peter BEETHAM et al.
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		Section 6				
		310	320	330	340	350
atnepsps.PRO (297)	287					
bnepps.PRO (290)				C	E	
bnepps.PRO (286)				E	E	
petaroa.PRO (286)						
zmepps.PRO (214)						
Consensus (297)	LKLMBRFGYSVERHSWSWDRFFVKGCGQYKSPGNAAYVEGDASSASYPLAGAAITGGTGTVTVRGGCTTSLQGDVKFA					
		Section 6				
		371	380	390	400	410
atnepsps.PRO (364)						
bnepps.PRO (360)						
petaroa.PRO (360)						
zmepps.PRO (288)						
Consensus (371)	EVLERKMGCCKVBYWTENSVTVTGPPRDAFGRKLRAIDVNMMNKMPDVANTLAVVALPADGPTTIRDVAQRVKETE					
		Section 7				
		445	450	460	470	480
atnepsps.PRO (438)						
bnepps.PRO (434)						
petaroa.PRO (434)						
zmepps.PRO (362)						
Consensus (445)	RMLAICTBLRKLGATEVGSDYCIITPPBKLNVTIDTYDDHMRMAMAFSLAACADVVPVTINDPGCTRKTIFPDYF					
		Section 8				
		518	527	518	500	490
atnepsps.PRO (512)						
bnepps.PRO (508)						
petaroa.PRO (508)						
zmepps.PRO (435)						
Consensus (519)	QVLESITKH					

FIG. 4B

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